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Wassim Haddad

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EXAMINER

DUNN, DARRIN D

ART UNIT

PAPER NUMBER

2109

MAIL DATE

DELIVERY MODE

05/04/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/697,961	HADDAD, WASSIM	
	<b>Examiner</b>	<b>Art Unit</b>	
	Darrin Dunn	2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/31/2003</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is response to the communication filed on 10/23/2003.
2. Claims 1-28 have been presented for examination.

#### ***Priority***

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10697961, filed on 10/31/2003. Acknowledgment is made of applicant's foreign priority date of 4/5/2003.

#### ***Information Disclosure Statement***

4. The information disclosure statement filed on 10/31/2003 references PG PUB 2003/0993553 A1; however, examiner believes PG PUB 2003/0093553 A1 was intended. Appropriate correction is required.

#### ***Drawings***

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

FIG.4 reference characters [200, 210], FIG. 5 reference characters [104h, 104f], and FIG. 7 reference characters [702, 722] are not referenced in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement

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drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Paragraph [0045], reference characters [120h, 120f] and paragraph [0049] reference character [101f] are not shown in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to because paragraph [0041] references FIG. 1 opposed to FIG. 3. Paragraph [0044] references FIG. 3 opposed to FIG. 5. Paragraph [0044] references FIG. 1 opposed to FIG. 3. Paragraph [0045] references FIG. 3 opposed to FIG. 5. Please note that examiner only makes reference to what is believe to be the correct reference figure[s]; however, clarification of the reference figures will absolve the objection. Corrected drawing

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sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

8. Claim 23 is objected to because of the following informalities: “Considering” in line 8 should be changed to “consider.” Appropriate correction is required.

*Claim Rejections - 35 USC § 102*

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

10. Claims 1-7, 9-13, and 15-28 are rejected under 35 U.S.C. 102(a) as being anticipated by O'Neill et al. (USPN 2002/0191593).

11. As per claim 1, O'Neill et al. teaches a method of establishing a network connection capable of transmitting data from a computing device to a network wherein the computing device is capable of connecting to at least one network and of making requests for data from the at least one network and has a network connection with an existing network ([FIG 1], [ABSTRACT], [0002] e.g., end node/mobile device, i.e., computer device, establish and conduct communication sessions, i.e., establishing network connection capable of transmitting data, where end node/mobile node changes point of connection from one access node to another access node, i.e., capable of connecting to at least one network, where data communication is conducted between node X and end node Y, i.e., data requests from at least one network, and the home mobility agent allows end node X to maintain reachability as it moves between access nodes, i.e., existing network connection), the method comprising:

determining whether data requested by the computing device originates within the network ([0004] e.g., the network is interpreted as the foreign network. Mobile IP provides for a determination that the mobile node is located in a foreign network, i.e., broadcasting, see Mobile IP in prior art citation).

if the data requested by the computing device does originate within the network ([FIG 1]), breaking at least a portion of the network connection with the existing network and establishing a network connection with the network for that portion of the network connection that was previously connected to the existing network ([FIG 1],[0004] e.g., existing network is interpreted as a home network. A change of point of attachment, i.e., handover, implies that a connection to the home network[existing network] is broken, and the connection [packet routing] is re-established after the mobile node acquires a CoA from the foreign network[the network]).

12. As per claim 2, O'Neill et al. teaches a method according to claim 1, which uses the Session Initiation Protocol (SIP) to initiate the breaking of the network connection to the existing network connection ([FIG. 1], [0005], [0011]).

13. As per claim 3, O'Neill et al. teaches a method according to claim 1 in which at least one of the network and existing network comprises a plurality of sub connections and the method is applied to at least one of the sub connections ([FIG 1], [0006]).

14. As per claims 4, O'Neill et al. teaches a method according to claim 1 in which the portion of the network connection and the existing network that is broken is re-established once data no longer originates within the network ([FIG 1], [Page 8, paragraph 2] e.g., this claim is interpreted to mean that real time data, such as voice, is not used by a mobile node. In this case, SIP is not employed to support real time data communication. Rather, Mobile IP teaches that a CoA is employed to maintain a network connection for non-real time data, see Mobile IP, However, in the case of voice, SIP provides for the use of URLs mapped to an IP address of the user device to enable real time data transmission, see IP Multimedia Services – Session Initiation Protocol in prior art citation).

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15. As per claim 5, O'Neill et al. teaches a method according to claim 1 in which the Mobile IP is used to maintain a network connection with the existing network ([FIG 1], [0008]).

16. As per claim 6, O'Neill et al. teaches a method according to claim 1 in which the computing device is assigned an IP address within the network for the transmission of data that originates from the network ([0004] e.g., IP host/mobile device inherently uses an IP address for communication. Mobile IP further provides that the device is assigned a permanent IP address by the home network, see Mobile IP in prior art citation).

17. As per claim 7, O'Neill et al. teaches a method according to claim 6 in which Mobile IP is used to maintain a network connection with the existing network and the IP address assigned to the computing device is used instead of a care of address assigned by the Mobile IP for data that originates within the network ([FIG 1], [0006] e.g., Mobile IP provides for a network connection and SIP enables voice, i.e., data originating in the network, that utilizes an IP address of the device. SIP provides for the association of the a URL with an IP address as to provide integrated mobility supporting both real time and non-real time communication).

18. As per claim 9, O'Neill et al. teaches a computing device capable of establishing a network connection ([FIG 1 – end node]), and capable of transmitting data to, an existing network, ([FIG 1] – home network]), the device being capable of determining the origin of data transmission ([FIG 1], [0004], [0043 –line 16]), and further being capable of being given a care of address by a network which can be used to enable data transmission to the existing network such that the data sent from the device generally uses the care of address ([0004] e.g., a care of address assigned to end node in foreign network for data transmission. Mobile IP inherently provides a care-of-address for data transmission, see Mobile IP in prior art citation), the device



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being arranged to communicate with the network without using the care of address if it is determined that data being sent to the device originates within the network ([FIG 1], [0005], [0006] e.g., SIP provides for real time data transmission support).

19. As per claim 10, O'Neill et al. teaches a device according to claim 9 which is arranged to receive a network address ([FIG 1]), which may be an IP address, to use whilst performing one of requesting and receiving data originating from within the network ([0004], [0005], [0006] Mobile IP provides for the assignment of a care of address to a mobile device. SIP provides for the association of a URL with an IP address in the event of real time/voice transmission).

20. As per claim 11, O'Neill et al. teaches a device according to claim 10, which is arranged such that once data no longer originates from within the network, the network address is no longer used ([FIG. 1], [0005], [0006] e.g., the claim is interpreted to mean that if voice data is no longer transmitted, i.e., no longer originating within the network, then the IP address is no longer employed via SIP. The reference specifically provides for voice support via Mobile IP and SIP. It is understood that Mobile IP is employed to maintain the network connection. Mobile IP teaches that a CoA is employed to maintain a network connection, i.e., the IP address is no longer employed).

21. As per claim 12, O'Neill et al. teaches a processing device capable of controlling a network and network connections within a network ([FIG. 1] e.g., access node), the processing device being capable of allowing at least one computing device to make a network connection to the network ([FIG 1]), which connection is capable of transmitting data, while, at least initially, maintaining a network connection to an existing network ([FIG. 1 e.g., home network), the processing device being arranged to provide at least one computing device with a care of address

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allowing data to be routed from the existing network to the network ([FIG 1], [0004] e.g., Mobile IP provides a care of address to end node), the at least one computing device comprising a data transfer controller ([0020] e.g., end node inherently contains a processor) capable of determining whether data being transmitted to the computing device originates within the network([0043]), and if this is the case being further capable of considering whether data should be transmitted without the use of the care of address ([FIG. 1], [0006] e.g., end node transmitting to SIP reflects capability of transmitting data without using a care of address because voice transmission utilizes SIP).

22. As per claim 13, O'Neill et al. teaches a processing device according to claim 12 which is arranged to assign a network address, which may be an IP address, to a computing device once it has been determined that the care of address should not be used ([FIG 1,2],[0005] – session signaling server module).

23. As per claim 15, O'Neill et al. teaches a network capable of allowing a computing device to establish a network connection therewith whilst maintaining a network connection to an existing network ([FIG. 1], by, initially at least, using a care of address for that computing device within the network ([FIG. 1], [0004] e.g., Mobile IP), a data transfer controller of a processing device of the network being arranged to determine whether data being transmitted to said computing device originates with said network ([FIG 1], [0043] e.g., access node) and if this is the case further being arranged to consider whether said data should be transmitted without the use of said care of address ([FIG 1], [0006] e.g., access node utilizes SIP).

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24. As per claim 16, O'Neill et al. teaches a memory storing instructions which when read on to at least one processing device cause that processing device to perform the method of claim 1 ([0029] e.g., modules).

25. As per claim 17, O'Neill et al. teaches a memory storing instructions which when read on to at least one processing device cause that processing device to perform the method of claim 9 ([FIG 1., [0020], [0043] e.g., end nodes, such as mobile devices, inherently contains instructions for maintaining a connection. End nodes can establish and conduct communication sessions with an access node).

26. As per claim 18, O'Neill et al. teaches a memory storing instructions which when read on to a processing device cause that processing device to function as the device of claim 12 ([FIG 1], [0029-32] e.g. modules).

27. As per claim 19, O'Neill et al. teaches a memory storing instructions which when read on to a processing device running a network cause the network to function as the network of claim 15 ([FIG 1], [0029-32] e.g. modules).

28. As per claim 20, O'Neill et al. teaches a method establishing a network connection to a network ([FIG 1]), the network connection being capable of transmitting data from a computing device ([FIG 1] e.g., computing device interpreted as an end node), the computing device having assigned thereto a network address from an existing network ([0004]) e.g., Mobile IP provides a permanent, fixed address of the mobile node which is used by TCP and higher level layers, see Mobile IP), and having a network connection with the existing network ([FIG 1], the method comprising:

providing the computing device with a care of address as it enter the network so that data intended for the computing device can be routed to the computing device whilst it is in the network ([0004] e.g., Mobile IP provides for a care-of-address for a mobile node as it enters a foreign network);

determining whether data requested by the computing device originates within the network ([0043] e.g. an access node provides an identifier to end node. In addition, Mobile IP also provides this capability via broadcasting, see Mobile IP in prior art citation);

if the data requested by the computing device does originate within the network, breaking at least a portion of the network connection with the existing network ([0004] e.g., Mobile IP handover) and assigning a network address for the network to the computing device such that data is sent to the computing device from the network rather than using the care of address for that portion of the network address that has had its connection to the existing network broken ([FIG 1], [0005], [0006], [FIG] e.g., SIP handles session termination and initiation).

29. As per claim 21, O'Neill et al. teaches a device capable of establishing a network connection with and capable of transmitting to, a home network, the device capable of determining the origin of data transmission and further capable of being given a care of address by a foreign network, which can be used to enable data transmission to the home network such that data sent from the device generally uses the care of address ([FIG 1], [0004] e.g., end node), the device being arranged to communicate with the foreign network without using the care of address if it is determined that data being sent to the device originates within the foreign network ([FIG 1], [0006] e.g., SIP support for voice communication).

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30. As per claim 22, O'Neill et al. teaches a server capable of controlling a network and network connections within a network ([FIG 1] e.g. access node), the server being capable of allowing at least one computing arrangement capable of connecting to a network to make a network connection to the network ([FIG. 1]), the connection being capable of transmitting data, whilst, at least initially, maintaining a network connection to an existing network ([FIG 1] e.g., home network), the server being arranged to provide the at least one computing arrangement with a care of address allowing data to be routed from the existing network to the network ([FIG 1], [0004]), the at least one computing arrangement comprising a data transferrer capable of determining whether data being transmitted to the computing arrangement originates within the network ([FIG 1], [0043]) and if this is the case being further capable of considering whether the data should be transmitted without the use of the care of address ([FIG 1], [0005], [0006] e.g., data is capable of being transmitted via SIP).

31. As per claim 23, O'Neill et al. teaches a network capable of allowing a computing arrangement capable of establishing a connection with a network to establish a network connection therewith whilst maintaining a network connection to an existing network ([FIG 1]), by, initially at least, using a care of address for that computing arrangement within the network ([0004]), the network comprising a processing arrangement which further comprises a data transfer controller for determining whether data being transmitted to the computing arrangement originates within the network ([FIG 1-access node], [0043]) and, if this is the case, being arranged to consider whether the data should be transmitted without the use of the care of address ([FIG 1], [0006] e.g., SIP).

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32. As per claim 24, O'Neill et al. teaches a method of establishing a network connection capable of transmitting data from a computing device to a network wherein the computing device is capable of connecting to at least one foreign network and has a network connection with a home network ([FIG 1]), the method comprising:

determining whether data requested by the computing device originates within the foreign network ([FIG 1 – 118], [0043]);

if the data requested by the computing device does originate within the foreign network, breaking at least a portion of the network connection with the home network and establishing a network connection with the foreign network for that portion of the network connection that was previously connected to the home network([0004] e.g., Mobile IP handover) by assigning an IP address to the computing device within the foreign network for transmission of data that originates from the foreign network ([0004] e.g., care of address); and

using Mobile IP to maintain a network connection with the home network and the IP address assigned to the computing device is used to send data to the computing device instead of a care of address assigned by the Mobile IP for data that originates within the foreign network ([FIG 1], [0006] e.g., SIP provides for an association of a URL to an IP address for real time data transmission).

33. As per claim 25, O'Neill et al. teaches a method according to claim 24 in which at least one of the foreign network and home network comprises a plurality of channels and the method is applied to at least one of the channels ([FIG 1]).

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34. As per claim 26, O'Neill et al. teaches the method according to claim 24 which uses the Session Initiation Protocol (SIP) to initiate the breaking of the network connection to the home network ([0005]).

35. As per claim 27, O'Neill et al. teaches a computing device capable of establishing a network connection with, and capable of transmitting data to, and existing network ([FIG 1-160,118]), the device being capable of determining the origin of data transmissions ([0043]) and further being capable of receiving a care of address from a network ([0004]) from a network which can be used to enable data transmission to the existing network such that data sent from the device generally uses the care of address ([FIG 1], [0004]), if it is determined that data being sent to the device originates within the network then the device is arranged to receive a network address to use whilst performing one of requesting and receiving data originating from within the network ([FIG 1], [0006] e.g., SIP provides for real time mobility support, in which it is understood that SIP utilizes an associated URL for a mobile device to allow for real time communication) and thereafter the device being arranged to communicate with the network without using the network address until such time that data no longer originates from within the network after which the network address is no longer used ([0004], [0006] e.g., this portion is interpreted where at the point real time communication, i.e., voice communication, is not used by the end node, the device is capable/arranged to communicate using a care-of-address for non-real time communication).

36. As per claim 28, O'Neill et al. teaches a computing device according to claim 27 in which the network address is an IP address ([0004], [0005], [0006] e.g. In SIP, each user is

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uniquely identified by a SIP universal resource indicator (URL). An IP address is associated with the user in order to route SIP signaling from a SIP registrar).

***Claim Rejections - 35 USC § 103***

37. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

38. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

39. Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill et al. (USPN 2002/0191593) in view over Shoaib et al. (USPN 2003/0193910).

40. As per claims 8 and 14, O'Neill et al. teaches a method according to claims 1 and 12, respectively, in which the computing device is capable of assessing security implications before at least a portion of the network connection with the existing network for the data is broken and a network connection that portion of the network connection that was previously connected to the existing network is established, an assessment of at least one of the following: the security



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implications for the network; whether there is sufficient bandwidth in the network to support the new connection; whether a network connection to the network would be faster/slower than the network connection to the existing network ([0021]).

However, O'Neill et al. does not teach an assessment of the bandwidth and speed of proposed connection occurs. Shoaib et al. teaches an assessment of bandwidth during handover ([0008] e.g., bandwidth/ bytes per second (speed of connection)).

At the time the invention was made, one of ordinary skill in the art would have motivation to modify O'Neill et al. to further include an assessment of available bandwidth prior to a handover as taught by Shoaib et al. Both O'Neill et al. and Shoaib et al. pertain to wireless networks. Moreover, O'Neill et al. specifically contemplates the implications that occur prior to handover- assessing security implications. In addition, O'Neill et al. seeks to increase bandwidth utilization on network links [0012] and track resource information, such as information on available remaining bandwidth [0031]. Since devices, such as mobile phones utilizing voice, may require higher bandwidth to operate efficiently, and since O'Neill et al. specifically provides for voice communication support [0006], one of ordinary skill in the art would have an expectation of successfully integrating a bandwidth assessment as taught by Shoaib et al. to realize optimized results prior to a handover, especially when voice communication is employed by a mobile device.

### ***Conclusion***

41. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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6973309 – Method and System for Re-Direction and Handoff for Pre-Paid Mobile Services

6992994 – Methods and Systems for a Generalized Mobility Solution

2002/0039367 – Selection of Serving Network Element in Telecommunication Network

2004/0095932 – Method for SIP – Mobility and Mobile –IP Coexistence

2004/0122976- Integrated Mobility Management

2004/0203752 – Mobile Communication System

S. Faccin, “IP Multimedia Services: Analysis of Mobile IP and SIP Interactions in 3G Networks,” IEEE Communications Magazine (January 2004).

E. Wedlun, “Mobility Support using SIP,” Proceedings of the 2<sup>nd</sup> ACM International Workshop on Wireless mobile multimedia (1999).

D. Ghosh, “Mobile IP,” ACM Crossroads student magazine (November 2000),

[http://www.acm.org/crossroads/crew/debalina\\_ghosh.html](http://www.acm.org/crossroads/crew/debalina_ghosh.html)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darrin Dunn whose telephone number is (571) 270-1645. The examiner can normally be reached on EST:M-R(8:00-5:00) 9/5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Xiao Wu can be reached on (571) 272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DD

04/27/2007



XIAO WU  
SUPERVISORY PATENT EXAMINER